NYC Environmental Protection

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Mr. Peter D. Lopez
Regional Administrator
United States Environmental Protection Agency, Region 2
Ted Weiss Federal Building
290 Broadway
New York, NY 10007

Re: Gowanus Superfund CSO Alternatives

Dear Regional Administrator Lopez:

During the past several months, our technical teams have jointly been assessing infrastructure options to achieve our shared objective of significantly reducing CSOs into the Gowanus Canal on an aggressive timeline. Recent discussions have focused on the potential construction of a 16-million-gallon storage tunnel rather than two smaller storage tanks, which would provide benefits such as fewer annual overflows, reduced construction impacts on the community, and long-term sustainability as this popular neighborhood continues to grow. DEP understands EPA's concerns about the projected 2030 completion date of a tunnel, but we believe that the generational benefits, discussed herein, clearly merit consideration of this alternative; a comparison table is attached.

Progress to Date

Since the issuance of the ROD in 2013, DEP has reduced CSO quantities into the Gowanus Canal by 34% with the upgrade of the Gowanus Pumping Station. We estimate that an aggregate 44% reduction will soon be attained with the near-term completion of high-level storm sewers and green infrastructure projects.

Design of the storage tank at RH-034 is 90% complete. DEP has acquired the properties necessary to construct this storage tank through eminent domain and is in the process of relocating the tenants. Bidding documents are being prepared for a contract to demolish and preserve certain materials at these sites.

DEP has also made significant progress on the procurement process to have a tunnel design firm engaged by the end of calendar 2019 should EPA approve this alternative. Some of the design work that DEP has completed for the RH-034 storage tank is readily transferrable to the design of a storage tunnel, thus saving effort and time. The properties that were acquired last year for

the RH-034 tank would serve as the location for the tunnel's drop shaft, dewatering shaft, and construction staging.

The New York City Department of City Planning (DCP) recently announced a proposed rezoning of the Gowanus neighborhood, and the ULURP and CEQR processes are now underway. The rezoning contemplates up to 8,300 new residential units in the area, which would include 30% affordable apartments. This could generate, at some future time, as much as 1.7 million gallons per day of additional sanitary sewage to the area's combined drainage system. Such a rezoning should, however, contribute to significant reductions in stormwater due to mandates for onsite detention at new high-rise construction, and decreased impervious areas in all current commercial zones that become reclassified as residential. A drainage analysis being performed by DEP to support the ULURP assessment.

Summary of Tunnel Alternative Benefits

1- Greater CSO Capture:
Upon completion of the 8- and 4-million-gallon storage tanks, CSOs reductions are projected to be 83% at RH-034 and 86% at OH-007 for a typical rainfall year, surpassing the ROD's solids reductions targets of 58% to 74%. The proposed 16-million-gallon storage tunnel would provide even greater CSO reductions of 88% at RH-034 and 100% at OH-007 for the typical rainfall year. Furthermore, the number of CSO overflow events to the Gowanus Canal is projected to decrease from 6 and 4 per year with tanks to 4 and 0 per year with the tunnel at the RH-034 and OH-007 outfalls respectively.

2- Sea Level Rise:
While the extent of sea level rise is uncertain, its impacts will make neighborhood drainage more complicated in the coming decades. As water surface elevations in the Gowanus Canal rise, tide gates will remain closed for longer periods, slowing street drainage rates. In contrast to the tank configurations, a larger, scalable storage tunnel that connects CSO outfalls would enable DEP to proactively curtail surcharging related to sea-level rise, thus improving land-side conditions.

3- National Grid Cutoff Wall:
We understand National Grid is proceeding with construction of the Fulton Barrier Wall despite serious concerns raised by DEP related to the structural stability of that wall and its upland anchoring system. Adapting the RH-034 tank to accommodate modifications in Grid's wall design will result in significant cost and schedule impacts for the CSO tank project. The proposed storage tunnel, with its small-footprint shafts located further from Grid's wall is, however, able to accommodate the prospective need for additional wall anchoring and possible impacts from the dredge.

4- Benefits to the Community:
The tunnel provides significant quality-of-life advantages from both a construction and long-term operations perspective. Traffic and noise impacts in this already-congested area would be reduced and more green space will become available. The tunnel could

also defer or offset the need for conventional sewer repair or replacement work, lessening the impacts of such expensive and intrusive work on the community.

5- Sustainability:
In terms of resiliency and sustainability, the tunnel will provide better protection for the vulnerable Gowanus neighborhood as sea levels rise and rainfall intensities increase. The tunnel can provide a backbone for bolting on a number of longer-term solutions to address future street drainage, sewer backups, and storm surges. During a storm surge event, the tunnel's outlet can relieve inland flood waters. With a projected service life of 150 years, the tunnel is likely to long outlast the tanks.

6- Development and Population Growth:
While the City's vision for the land use in the Gowanus neighborhood is still being formulated, the tunnel alternative – already 4 million gallons larger than the tanks – provides flexibility that the tanks do not, should future density conditions necessitate. Given that the tanks sizes are fixed, there is no future scalability.

7- Schedule:
DEP's in-house engineers and its consultant team have thoroughly evaluated the construction timeline, and is confident that the tunnel can be completed and in service by the end of 2030. It should be noted that the tunnel design can take advantage of much of the work already done in support of the RH-034 tank and the property acquisition.

Thank you again for your guidance and cooperation on this transformational project. If there is any additional information needed by EPA in its decision making, please let me immediately know.

Sincerely,

Vincent Sapienza, P.E.
Commissioner

Attachment: Comparison Table

cc: BEPA (Licata), BEDC (Barrio), BLA (Cushman), BPAC (DeLoach), Exec (Cipriano)